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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,741	01/16/2002	Ted Ziemkowski	10016218-1	7729
22879	7590	02/09/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			GAGLIOSTRO, KEVIN M	
			ART UNIT	PAPER NUMBER
			2615	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,741	ZIEMKOWSKI, TED	
	Examiner	Art Unit	
	Kevin M. Gagliostro	2615	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 January 2002.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 16-20 is/are allowed.
 6) Claim(s) 1, 2, 4-7, and 8-15 is/are rejected.
 7) Claim(s) 3 and 7 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11/16/02 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation " said plurality of optical input devices " in line 1. There is insufficient antecedent basis for this limitation in the claim. Note that "said plurality of optical input devices" needs to be dependant on claim 6 not claim 5.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for rejections under this section made in this office action:

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 5, 7, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,411,780 to Maruyama.

Maruyama clearly shows all of the limitations cited in claim 1. See all material cited in the specification. Referring to claim 1, Maruyama describes a digital camera comprising:

"a light input device for detecting a first light pulse;"

Specifically, Maruyama describes this light input device as a "remote control signal receiver opening" (Maruyama: figure 2, item 18 and column 3, lines 43-48) and first light pulse is a signal upon the actuation of a predefined command transmitted (via light pulse) from the remote control.

"a processor, coupled to the light input device;"

Specifically, Maruyama describes this processor as "CPU 28" which centrally controls the "remote control signal reception circuit 46" (Maruyama: column 5, lines 59-67) which is described as receiving specified remote control signals (Maruyama: column 7, lines 37-40).

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"a timer, initiated by the processor in response to receiving a signal therefrom indicative of said first light pulse;"

Specifically, Maruyama describes the CPU 28 (or processor) checking if the remote control reception circuit 46 received a signal from the remote control and checks if the signal received indicated a self-timer photography mode (Maruyama: column 8, lines 28-37).

"wherein the processor is programmed to initiate capture of an image in response to an indication from the timer that lapse of time period greater than the duration of said first light pulse has occurred; and"

Specifically, Maruyama describes CPU 28 (or processor) that receives a remote control signal (or first light pulse) and then is set to a self timer mode after receiving the signal, hence the duration (or lapse of the time period) must be greater than the duration of the first light pulse itself (Maruyama: column 8, lines 21-26).

"a light output device that transmits a second light pulse in synchronism with initiation of said capture of an image, in response to a signal issued from the processor."

Specifically, Maruyama describes this light output device as "strobe light unit" (figure 2, item 11) that transmits a second light pulse (or flash) in synchronism with the initiation of said capture of an image, which is a commonly known embodiment of a flash within the art. This second light pulse from the strobe light unit 11 is initiated from the "strobe circuit 54" (Maruyama: column 5, lines 46-53) which is, in fact, controlled by the CPU 28 (processor) (Maruyama: column 5, lines 59-67).

Furthermore, it is inherent that the strobe is in synchronism with initiation of capturing an image.

Maruyama clearly shows all of the limitations cited in claim 2. See all material cited in the specification. Referring to claim 2, Maruyama describes the camera of claim 1 wherein said time period is slightly greater than the length of time it takes for said first light pulse to decay to a level of zero luminosity. Specifically, Maruyama describes a function F_SELF that determines if a signal has been received and then CPU 28 (processor) zeros function F_SELF, hence the luminant signal (or first light pulse) must be zeroed or completed so as to accomplish the determining (i.e. zero luminosity) (Maruyama: column 8, lines 40-49).

Maruyama clearly shows all of the limitations cited in claim 4. See all material cited in the specification. Referring to claim 4, Maruyama describes the camera of claim 1, further including an image capture mode input device for manually selecting one of a plurality of image capture modes, each of which has parameters associated therewith that are used by the processor to determine whether to initiate said capture of an image. Specifically, Maruyama describes one of these image capture mode input device as "photography mode button 14" (figure 1, item 14), which is a switch for enabling and disabling a photography mode (column 3, lines 30-33), which

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by default would consist of known parameters associated therewith that are used by the processor (CPU 28) to determine whether to initiate said capture of an image manually. In corresponding to a “plurality” of image capture modes; Maruyama further describes another one of these image capture modes as being actuated from the remote control reception circuit 46 which receives a signal from the remote control that may indicate a self-timer photography mode (Maruyama: column 8, lines 28-37).

Maruyama clearly shows all of the limitations cited in claim 5. See all material cited in the specification. Referring to claim 5, Maruyama describes the camera of claim 4, wherein said capture of an image is initiated when a detected said light pulse has characteristics that correspond with the parameters associated with a selected one of said image capture modes. Specifically, Maruyama describes a “remote control signal reception circuit 46” (Maruyama: column 5, lines 59-67) which is described as receiving specified remote control signals (Maruyama: column 7, lines 37-40) or light pulse and checks if the signal received indicated a self-timer photography mode (Maruyama: column 8, lines 28-37). By default, the embodiment of this light pulse is a command with distinguishing parameters for distinguishing it as the self-timer mode as compared to another mode.

Maruyama clearly shows all of the limitations cited in claim 7. See all material cited in the specification. Referring to claim 7, Maruyama describes the camera of claim 5, wherein one of said plurality of optical input devices is a serial port transceiver for detecting a predefined light pulse coding sequence and indicating to the processor whether the coding sequence corresponds with one of the parameters associated with a selected one of said image capture modes. Specifically, Maruyama describes one of the said pluralities of optical input devices being a “remote control signal receiver opening” (Maruyama: figure 2, item 18 and column 3, lines 43-48), which receives a first light pulse (or signal) from the remote control. Furthermore, Maruyama describes this processor as “CPU 28” which centrally controls the “remote control signal reception circuit 46” (Maruyama: column 5, lines 59-67) which is described as receiving specified remote control signals (Maruyama: column 7, lines 37-40). These specific remote control signals are, in fact, representations of coding sequences that correspond with one of the parameters associated with a selected one of said image capture modes.

Maruyama clearly shows all of the limitations cited in claim 8. See all material cited in the specification. Referring to claim 8, Maruyama describes the camera of claim 5, wherein one of the parameters associated with a given said image capture mode comprises a specific wavelength range for the detected light pulse. Specifically, Maruyama describes the optical input devices being a “remote control signal receiver opening” (Maruyama: figure 2, item 18 and column 3, lines 43-48), which receives a first light pulse (or signal) upon the actuation of a predefined command transmitted (via light pulse) from the remote control. This signal, having its own

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unique parameters distinguishing it from other modes (or commands), which is done by having its own unique wavelength which is intercepted and translated by the optical input device.

Maruyama clearly shows all of the limitations cited in claim 9. See all material cited in the specification. Referring to claim 9, Maruyama describes the camera of claim 5, wherein one of the parameters associated with a given said image capture mode indicates that said capture of an image is to be triggered by a shutter button instead of said first light pulse. Specifically, Maruyama describes one of these image capture mode input device as "photography mode button 14" (figure 1, item 14), which is a switch for enabling and disabling a photography mode (column 3, lines 30-33), which by default would consist of known parameters associated therewith that are used by the processor (CPU 28) to determine whether to initiate said capture of an image manually.

Claim Rejections - 35 USC § 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 103 that form the basis for rejections under this section made in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 6,411,780 to Maruyama.

Referring to claim 6, Maruyama describes the camera of claim 5, further comprising a plurality of optical input devices for detecting said first light pulse including a charge-coupled device and an infrared light sensor, wherein one of said parameters indicates which one of the optical input devices is used as the light input device. Specifically, Maruyama describes this light input device as a "remote control signal receiver opening" (Maruyama: figure 2, item 18 and column 3, lines 43-48), which receives a first light pulse (or signal) upon the actuation of a predefined command transmitted (via light pulse) from the remote control. Maruyama does not teach that a remote control uses infrared (IR) to transmit its commands to a light input device and that a charge-coupled device (CCD) is an image-capturing element used within a camera to capture an image. Please note that Maruyama does have an area sensor 47 (Maruyama: column 7, lines 8-15). However, the examiner takes Official Notice that it is old and well known within the art to use an IR signal for a remote

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control signal and a CCD for capturing an image within a camera. Therefore, it would have been obvious to one of ordinary skill at the time of the invention to include the IR remote control signal and CCD for capturing an image within the camera taught in Maruyama.

6. Claims 10-12 are rejected under 35 U.S.C. 103(c) as being unpatentable over Patent No. 6,411,780 to Maruyama in view of U.S. Patent No. 5,721,971 to Sasaki.

Regarding claim 10 Maruyama describes the camera of claim 1, but does not teach the camera further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device has pre-established spectral characteristics. Sasaki describes an electronic photoflash device for a camera with a filter circuit (Sasaki: figure 3; C4, R4, R5 and column 4, lines 4-11) that is part of the photodetection circuit (or light input device) (Sasaki: figure 3, item 3), which is attached to the control circuit (Sasaki: figure 3, item 2). Since the filter and the photodetection circuit are attached to the control circuit, the filter can be described as being in-between the photodetection circuit and the control circuit. Furthermore, the detection aspect of the regions 2 and 3 (Sasaki: figure 3, items 2 and 3) would, in fact, have a pre-established spectral characteristic, as they are part of a circuit containing electronic components with solidified values that are pre-established. Therefore it would have been obvious to one of ordinary skill in the art to modify the camera of Maruyama to include the filter being coupled between the light input device and the processor. One would have been motivated to combine the camera of Maruyama to include the filter being coupled between the light input device and the processor of Sasaki in that the design provides a low-cost wireless slave electric flash device capable of detecting preliminary flashes of light, and with that said, a low-cost device would be desirable to any consumer (Sasaki: column 2, lines 23-28).

Regarding claim 11 Maruyama in view of Sasaki describes the camera of claim 1, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device as described in claim 10. As for the aforementioned not being an **extraneous** event, Sasaki describes the sequential circuit layout (of claim 10) with the filter being coupled between the light input device and the processor (Sasaki: figure 3), which is defined as a "control" circuit and by default serves as a means for control of a device, and therefore can not be extraneous.

Note: definition of **extraneous** on the Web: "not pertinent to the matter under consideration"

Regarding claim 12 Maruyama in view of Sasaki describes the camera of claim 1, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device as

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described in claim 10. As for the aforementioned having characteristics that correspond with parameters associated with a selected one of said image capture modes, Maruyama further describes (as in claim 4) one of the image capture modes as a "photography mode button 14" (figure 1, item 14), which is a switch for enabling and disabling a photography mode (column 3, lines 30-33), which by default would consist of known parameters associated therewith that are used by the processor (CPU 28) to determine whether to initiate said capture of an image manually. In corresponding to a "plurality" of image capture modes; Maruyama further describes another one of these image capture modes as being actuated from the remote control reception circuit 46 which receives a signal from the remote control that may indicate a self-timer photography mode (Maruyama: column 8, lines 28-37).

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(c) as being unpatentable over Patent No. 6,411,780 to Maruyama in view of U.S. Patent No. 6,262,767 to Wakui.

Regarding claim 13, Maruyama describes a digital camera comprising a **single** light input device as a "remote control signal receiver opening" (Maruyama: figure 2, item 18 and column 3, lines 43-48) and first light pulse is a signal upon the actuation of a predefined command transmitted (via light pulse) from the remote control.

Maruyama describes a processor as "CPU 28" which centrally controls the "remote control signal reception circuit 46" (Maruyama: column 5, lines 59-67) which is described as receiving specified remote control signals (Maruyama: column 7, lines 37-40). Maruyama describes the CPU 28 (or processor) checking if the remote control reception circuit 46 received a signal from the remote control and checks if the signal received indicated a self-timer photography mode (Maruyama: column 8, lines 28-37). Maruyama describes CPU 28 (or processor) that receives a remote control signal (or first light pulse) and then is set to a self timer mode after receiving the signal, hence the duration (or lapse of the time period) must be greater than the duration of the first light pulse itself (Maruyama: column 8, lines 21-26). Maruyama describes one of these image capture mode input device as "photography mode button 14" (figure 1, item 14), which is a switch for enabling and disabling a photography mode (column 3, lines 30-33), which by default would consist of known parameters associated therewith that are used by the processor (CPU 28) to determine whether to initiate said capture of an image manually. In corresponding to a "plurality" of image capture modes; Maruyama further describes another one of these image capture modes as being actuated from the remote control reception circuit 46 which receives a signal from the remote control that may indicate a self-timer photography mode (Maruyama: column 8, lines 28-37). Maruyama describes this light output device as "strobe light unit" (figure 2, item 11) that transmits a second light pulse (or flash) in synchronism with the initiation of said capture of an image, which is a commonly known embodiment of a flash within the art. This second light pulse from the strobe light unit 11 is initiated from the "strobe circuit 54" (Maruyama: column 5, lines 46-53) which is, in fact, controlled by the CPU 28 (processor) (Maruyama: column 5, lines 59-67). Furthermore, it is inherent that the

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strobe is in synchronism with initiation of capturing an image. Maruyama does not teach a **plurality** of light input devices for detecting a first light pulse. Wakui describes the aforementioned “**plurality** of light input devices” for detecting said first light pulse including an image pickup circuit 7 (attached to the CCD) (Wakui: figure 5, item 7) and a photodiode 24 (Wakui: figure 5, item 24). Specifically, Wakui describes the photodiode 24 as receiving a first light pulse (or signal) upon the actuation of a predefined command transmitted from the remote controller 3 (Wakui: column 8, lines 15-28). Therefore it would have been obvious to one of ordinary skill in the art to modify the camera of Maruyama to include the plurality of light input devices. One would have been motivated to combine the camera of Maruyama to include a plurality of light input devices (such as the pickup circuit 7 and photodiode 24) of Wakui in that, the utilization of photodiode 24 is necessary for receiving the signal from the remote controller 3 (Wakui: column 8, lines 15-29) and the remote controller provides a wireless system for transmitting image data (Wakui: column 1, lines 36-41).

Regarding claim 14, Maruyama further describes the digital camera of claim 13 (Maruyama in view of Wakui), wherein said exposure is initiated when a detected said light pulse has characteristics that correspond with the parameters associated with a selected one of said image capture modes. Specifically, Maruyama describes an image capture mode (or camera exposure) as being actuated from the remote control reception circuit 46 which receives a signal (light pulse) from the remote control that may indicate a self-timer photography mode (Maruyama: column 8, lines 28-37), which does, in fact, have characteristics associated with it that distinguish it as that one image capture mode.

8. Claim 15 is rejected under 35 U.S.C. 103(c) as being unpatentable over Patent No. 6,411,780 to Maruyama in view of U.S. Patent No. 6,262,767 to Wakui further in view of U.S. Patent No. 5,721,971 to Sasaki.

Regarding claim 15 Maruyama in view of Wakui describes the camera of claim 13, but does not teach the camera further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device has pre-established spectral characteristics. Sasaki describes an electronic photoflash device for a camera with a filter circuit (Sasaki: figure 3; C4, R4, R5 and column 4, lines 4-11) that is part of the photodetection circuit (or light input device) (Sasaki: figure 3, item 3), which is attached to the control circuit (Sasaki: figure 3, item 2). Since the filter and the photodetection circuit are attached to the control circuit, the filter can be described as being in-between the photodetection circuit and the control circuit. Furthermore, the detection aspect of the regions 2 and 3 (Sasaki: figure 3, items 2 and 3) would, in fact, have a pre-established spectral characteristic, as they are part of a circuit containing electronic components with solidified values that are pre-established. Therefore it would have been obvious to one of ordinary skill in the art to modify the

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camera of Maruyama in view of Wakui to include the filter being coupled between the light input device and the processor. One would have been motivated to combine the camera of Maruyama in view of Wakui to include the filter being coupled between the light input device and the processor of Sasaki in that the design provides a low-cost wireless slave electric flash device capable of detecting preliminary flashes of light, and with that said, a low-cost device would be desirable to any consumer (Sasaki: column 2, lines 23-28).

Allowable Subject Matter

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following statement is a statement of reasons for the indication of allowable subject matter: Regarding claim 3, the Prior Art also fails to teach or suggest the camera of claim 1, wherein t is a value slightly greater than the length of time it takes for said first light pulse to decay to a level of zero luminosity, and wherein said time period is equal to n X t, where n is an integer representing that said camera is the nth said camera in a multiple-camera system.

10. Claims 16-20 are allowed.

The following is an examiner's statement of reasons for indication of allowable subject matter: Regarding claim 16 the Prior Art fails to teach or suggest the system for synchronizing a first exposure of a subject by a first camera with a second exposure of a subject by a second camera comprising the steps of: simultaneously initiating the first exposure and transmitting a light pulse from the first camera; and initiating the second exposure in response to the second camera receiving the light pulse from the first camera; whereby the subject is photographed from two different viewing angles. Claims 17, 18, 19, and 20 are allowable as they depend on claim 16.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent Number 5,724,620 to Hagiuda et al. Note that Hagiuda is considered pertinent to the applicant's disclosure in that the wireless strobe system consists of a primary strobe attached to the camera wherein it emits a light signal to the auxiliary strobe (separated from the camera).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Gagliostro whose telephone number is 703-308-6070 or 571-272-7363. The examiner can normally be reached on 8:00 - 5:00.

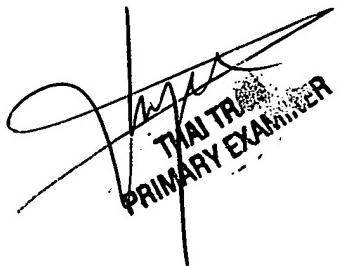
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 703-305-4725 or 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Gagliostro

02/01/2005



A handwritten signature of "THAI TRAN" is written over a printed nameplate. The nameplate reads "THAI TRAN" at the top, followed by "PRIMARY EXAMINER" below it, all in capital letters.